

REMARKS

Reconsideration of the rejections contained in the Office Action is respectfully requested. By this amendment claims 1, 4, 6, 9-17, and 21-22 have been amended. Currently, claims 1-22 are pending in this application.

Objections to the claims and rejection of claims under 35 USC 101 and 112

The Examiner objected to several of the claims and rejected several of the claims under 35 USC 101 and 35 USC 112. Applicants have amended the claims to address these issues and respectfully request that the objections/rejections be withdrawn.

In the last portion of section 5 of the Office Action (page 3 of the Office Action) the Examiner rejected claims 4-17, 21, and 22 under 35 USC 101. Applicants were not certain how to respond to this rejection. Specifically, the Examiner indicated that the recitation of an use, without setting forth any steps involved in a process, rendered the claims improper under 35 USC 101. Claim 4, however, recites a network element, not a method. Since it would appear that this rejection only applies to method claims, applicants were not certain how to respond to this rejection. The Examiner is respectfully requested to clarify this portion of the rejection in a subsequent Office Action so that applicants can respond appropriately.

Rejection under 35 USC 102

Claims 1-19 were rejected under 35 USC 102 as anticipated by Largman (U.S. Patent No. 7,137,034). This rejection is respectfully traversed in view of the amendments to the claims and the following arguments.

Claim 1 recites a “network element.” On page 1, lines 16-18, applicants define the term “network element” as “hubs, switches, routers, and other network devices, interconnected and configured to handle data as it passes through the network.” When drafting this application, applicants intentionally left servers and personal computers off of this list. Largman describes a way for a personal computer to be booted from different boot images. (See Largman at col. 1 line 62 to col. 2, line 47). Thus, Largman does not describe a “network element.”

The Examiner has taken the position that Largman describes a “network element” since Largman teaches a computer connected to a network. Applicants respectfully traverse this position, however, in view of the explicit definition of the term “network element” in the

specification which was consciously limited to network devices that “handle data as it passes through the network.” Since a computer connected to the network does not handle data as it passes through the network, a computer connected to the network is not a “network element” as defined in this application.

Claim 1 further recites that the network element has “a first processor supporting a first processing environment,” and an intelligent interface including “a second processor supporting a second processing environment independent of the first processing environment.”

Largman does not show a network element that has an intelligent interface having its own processor supporting a separate processing environment. Largman shows a computer having a CPU 10 that may operate in several different modes. In a normal mode, the computer runs a normal operating system from a first data store 12. (See Col. 4, lines 39-44). In a repair mode, the CPU can run software on a different data store 14 (See Col. 4, lines 59-61). From a review of the figures (see e.g. Fig. 1), it is clear that Largman has a single CPU that can boot from a first data store 12 or a second data store 14. A microcontroller controls switches 13, 19 to control which boot store is used by the CPU during the boot process. However, the microcontroller does not support a processing environment, but rather executes a simple program to allow a user to control which boot drive is connected to the CPU during the boot process.

The Examiner has stated that Largman teaches an independent operating environment. However, the Examiner has not specifically pointed out where Largman teaches a first processor and a second processor. Largman has a first processor (CPU 10) and a microcontroller 1A which “may execute a program in parallel.” (See Largman at Col. 4, line 61). However, the microcontroller is not a second “processor” since it cannot support a second processing environment independent of the first processing environment as claimed. To clarify the difference between what is claimed and what is shown in Largman, applicants have amended claim 1 to recite that the second processor is able to boot independent of a boot process of the first processing environment. This clarifies that both the first and second processors are CPUs or other similar processors that are able to boot and execute software processes.

In Largman, a data store switch 1Z is used to switch (toggle) which data source is used by the CPU during the boot process. (Largman at Col. 4, lines 4-8). In Fig. 1, the data store switch 1Z is the portion that is encircled by the dashed line. Fig. 2 shows a circuit diagram of the data store switch. (See Col. 2, lines 54-55). This circuit diagram is described at col. 4, lines 30-44.

As described by Largman at col. 4, lines 33-34, the microcontroller may be a Parallax BasicStamp II microcontroller. The following description of a Parallax BASIC Stamp II microcontroller was taken from the Parallax web site: see

<http://www.parallax.com/Store/Microcontrollers/BASICStampModules/tabid/134/ProductID/1/List/1/Default.aspx?SortField=ProductName.ProductName>

The BASIC Stamp® 2 is a 24-pin DIP (Dual inline package) module. Most commonly referred to as a microcontroller, on occasion you may see it being called a single board computer since it has its very own processor, memory, clock, and interface (via 16 I/O pins). Our BASIC Stamp 2 module has an extended temperature range of -40°C to +85°C (-40°F to +185°F) making it rated Industrial. The BASIC Stamp essentially serves as the brains inside of electronics projects and applications that require a programmable microcontroller. It is able to control and monitor switches, timers, motors, sensors, relays, valves, and more. Best yet, programming may be performed in the PBASIC language. Very similar to BASIC, this language has a quick learning curve and no compiler is required.

The BS2-IC is the single most popular BASIC Stamp module that we manufacture. Widely used in educational, hobby, and industrial applications. This module normally has no shortage of program space or I/O pins. Serial PC interface provides enhanced debug features. Technical specifications are listed below or view the comparison.pdf in the downloads section.

The BS2-IC is strongly recommended for first-time BASIC Stamp module users because of the many resources, documentation, source code, and customer projects that are available online and in print. Our Stamps in Class Educational Program was designed with this module, making it a great place to learn about microcontrollers. Once you have become familiar with programming in PBASIC and have designed your own projects, you may want to explore our selection of BASIC Stamps with increased power, speed, or memory.

As is clear from this description, the BASIC stamp 2 microcontroller has a processor that is able to execute instructions written using programming code. However, the BASIC stamp 2 microcontroller does not boot as a normal CPU would. Accordingly, in view of the amendments to the claims, applicants respectfully request that the rejection under 35 USC 102 be withdrawn.

Although only independent claim 1 has been discussed, similar amendments have been made to the other independent claims. Accordingly, the other independent claims are also patentable over Largman.

Non-statutory double patenting

The Examiner rejected several of the claims for non-statutory double patenting. Applicants will file a terminal disclaimer if the Examiner is of the opinion that a non-statutory double patenting rejection is still required once patentable subject matter has been found in this application.

Conclusion

Applicants respectfully submit that the application is in condition for allowance and an action to this effect is respectfully requested. If there are any questions or concerns regarding the amendments or these remarks, the Examiner is requested to telephone the undersigned at the telephone number listed below.

If any fees are due in connection with this filing, the Commissioner is hereby authorized to charge payment of the fees associated with this communication or credit any overpayment to Deposit Account No. 502246 (Ref: NN-15990).

Respectfully Submitted

Dated: August 13, 2008

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